MEMO

# TO: Maine DEP Hydropower and Dams

# FROM: Frank R. Richards

# RE: Lower Kennebec Dams WQC Opportunity to Comment

# Date: June 10, 2025

I am Frank Richards. I live in Vassalboro, between Augusta and Waterville. I am a long-term activist for alewife restoration. I am writing to comment on the WQC for the 4 lower Kennebec Dams.

I have had a fair amount of exposure to the FERC process. In the late 1990s I testified at the FERC Hearings on the Edwards Dam and the Fort Halifax Dam. I testified at the FERC Hearing in May about the dams in Waterville.

I have had a fair amount of exposure to dams and fish ladders. As the President of a lake association, I played a central role in building a fish ladder at the Webber Pond dam in 2008. Later, that led to testifying at several legislative hearings about alewife restoration.

More recently, I was active in the community group in Vassalboro, which removed 3 older dams and constructed 3 fish ladders to restore alewives to China Lake. I have been featured in 2 newspaper articles about fish ladders and alewives.

I have observed the challenges of fish ladders on 5 small dams. I will assert that the engineering knowledge for fish ladders on small dams has improved just remarkably over the last 20 years.

However, on bigger dams significant engineering problems persist. With all due respect to FERC, I don’t believe it is possible to find a single example of a successful fish ladder on a larger dam anywhere. I attached a link to an article about the ladder in Brunswick to illustrate.

I will argue that that building new fish passage structures on these 4 dams will only lead to modified dams where the turbine operates, but the new fish passage doesn’t, at least not very well.

I looked through the FERC EIS. I was disappointed that they didn’t give any weight to the historic failures of fish ladders on big dams. They didn’t offer any discussion. They simply declined to acknowledge the problem, despite many people bringing it up at the public hearings.

I looked through the FERC estimates of fish passage at the 4 dams with new fish passage solutions installed. With all due respect, those estimates are highly questionable because they are based on calculations, way more than direct experience with successful solutions.

I don’t believe FERC can provide reasonable evidence that their fish passage estimates are even in the ballpark of what would actually happen, based on experience anywhere.

I believe generally accepted professional methods were used. However, based on history, I see no reason to have any confidence that these estimates will match up with eventual experience. They are arguably calculations rooted in speculation, not meaningful, real-world estimates.

I also see no reason to think that any meaningful regulatory action will occur if those ladders are built, fail, and anadromous species are still essentially blocked below Waterville. This is “It”, so to speak, for another 50 years.

People have forgotten that the natural range for anadromous fish is well upstream from Waterville. I have read historical accounts of striped bass going all the way to Skowhegan during the spring and fall alewife runs.

As I understand the process, the standard for review, is “must be of sufficient quality to support all aquatic species indigenous to those waters without detrimental changes in the resident biological community”.

Anadromous species are indigenous to these waters and part of the residential biological community. They will quickly return if those dams are removed. They practically restored themselves in the habitat opened up by the removal of the Edwards and Ft. Halifax dams. The residential biological community welcomed them back.

I will argue that anadromous species cannot survive under the steps prescribed in the FERC EIS. Accordingly, I’d like to urge Maine DEP to deny the application for a state Wate Quality Certification.

I’d like to also specifically comment on the Shawmut dam. If the issues in Waterville began to evolve in a way that might force the mill in Fairfield to close … Well, even someone like me would object. That mill is probably second only to the shipyard in Bath in terms of its economic importance to Maine.

It seems to be assumed that dam removal would entail a complete de-watering of the pool that supplies water to the mill. However, there are likely engineering alternatives to supply water to the mill from the river, even with a significant, partial dam removal.

There are few things that would benefit a substantive discussion of the Shawmut Dam more than a neutral engineering study about the possibilities for both watering the mill and also providing free flowing water for fish passage.

That concludes my commentary. I’d like to thank DEP for the opportunity to comment. I’d like to thank people for taking the time to read through this.

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Attached is an article about the Brunswick fish ladder.

<https://www.newscentermaine.com/article/news/local/bath-brunswick/conservation-group-aims-to-improve-fish-passage-on-the-androscoggin-river-maine/97-68bd552f-8933-470d-83e0-0f686d61616e>